



## Portable Color Doppler Ultrasound Scanner

### C5VET

### Key Features

<b>System Configurations</b>	<p><b>Applications</b></p> <ul style="list-style-type: none"> <li>• Equine, Bovine, Feline, Canine, Swine, Goat, Llama, Ovine</li> </ul> <p><b>Imaging Modes</b></p> <ul style="list-style-type: none"> <li>• B mode</li> <li>• M mode</li> <li>• Pulse Wave Doppler (PW)</li> <li>• HPRF (High Pulse Repetition Frequency)</li> <li>• CDFI (Color Doppler Flow Imaging)</li> <li>• Power (Power Doppler Flow Imaging)</li> <li>• DirPower (Directional Power Doppler Flow Imaging)</li> </ul>	<p><b>Imaging features</b></p> <ul style="list-style-type: none"> <li>• Trapezoid imaging</li> <li>• Quad/Dual display</li> <li>• Duplex for simultaneous B and spectral Doppler</li> <li>• Triplex mode for simultaneous B, Color/Power, and spectral Doppler</li> <li>• Real-time Automatic Doppler measurement</li> <li>• Multi-Angular compounding imaging</li> <li>• Speckle removal imaging</li> <li>• Panoramic Imaging</li> </ul> <p><b>Language</b></p> <ul style="list-style-type: none"> <li>• Chinese, English, Russian, French, Spanish, Portuguese etc.</li> </ul>
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<b>Transducer</b> (One active transducer port/connection)	<p><b>C2-5 Convex array probe</b></p> <ul style="list-style-type: none"> <li>• Frequency Bandwidth: 2-5.0 MHz</li> <li>• Center frequency: 3.5 MHz</li> <li>• Field of View: 60 degree</li> <li>• Depth: 240mm</li> <li>• Radius: 60 mm</li> <li>• Trapezoidal imaging</li> <li>• Biopsy guide available</li> </ul> <p><b>L5-10 Linear array probe</b></p> <ul style="list-style-type: none"> <li>• Frequency Bandwidth: 5-10 MHz</li> <li>• Center frequency: 7.5 MHz</li> <li>• Field of View: 40 mm</li> <li>• Depth: 160 mm</li> <li>• Trapezoidal imaging</li> <li>• Biopsy guide available</li> </ul> <p><b>EC5-8 Endocavity array probe</b></p> <ul style="list-style-type: none"> <li>• Frequency Bandwidth: 5-8 MHz</li> <li>• Center frequency: 6.5 MHz</li> <li>• Field of View: 165 degree</li> <li>• Depth: 160 mm</li> <li>• Radius: 10 mm</li> <li>• Biopsy guide available</li> </ul>	<p><b>C2-5 Micro-convex array probe</b></p> <ul style="list-style-type: none"> <li>• 5.1. Frequency Bandwidth: 2-5.0 MHz</li> <li>• 5.2. Center frequency: 3.5 MHz</li> <li>• 5.3. Field of View: 104 degree</li> <li>• 5.4. Depth: 240 mm</li> <li>• 5.5. Radius: 20 mm</li> </ul> <p><b>75E40 Rectal Linear array probe</b></p> <ul style="list-style-type: none"> <li>• Frequency Bandwidth: 5-10 MHz</li> <li>• Center frequency: 7.5 MHz</li> <li>• Field of View: 40 mm</li> <li>• Depth: 160 mm</li> <li>• Trapezoidal imaging</li> </ul> <p><b>65E70 Rectal Linear array probe</b></p> <ul style="list-style-type: none"> <li>• Frequency Bandwidth: 4-9 MHz</li> <li>• Center frequency: 6.5MHz</li> <li>• Field of View: 70mm</li> <li>• Depth: 160mm</li> <li>• Trapezoidal imaging</li> </ul>
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## Specifications

### 1. System Architecture

- 1.1. All-digital broadband beam-formers
- 1.2. Harmonic Imaging (THI)
- 1.3. Multi-Angular compounding imaging
- 1.4. Steering image (B, color and spectral Doppler modes)
- 1.5. Multi-frequency in B, color and Doppler imaging

### 2. Zoom

- 2.1. Write (regional acoustic zoom) and read zoom
- 2.2. Zoom ratio: 6 times
- 2.3. For real-time and frozen images

### 3. Ergonomic Design

- 3.1. Home based and function grouped design for control panel
- 3.2. One button quick image/spectrum optimization
- 3.3. Lighting of the keyboard controls
- 3.4. High quality stereo audio speaker system
- 3.5. Input and output connections on the rear panel

### 4. Storage

- 4.1. 250 GB integrated hard drive
- 4.2. USB ports: 2 ports for data transportation
- 4.3. Images storage format: BMP, JPG, PNG, TIFF and AVI
- 4.4. DICOM storage, print, worklist, MPPS, SR, Q/R

### 5. Cineloop

- 5.1. Support B, M, Spectral Doppler, Color, Power, DirPower  
Simultaneous and independent review in duplex/triplex mode
- 5.2. Capacity:
  - B: Maximum 3000 frames
  - M, Spectral Doppler: 200 s

### 6. Image Adjustment

#### 6.1. B-MODE

- 6.1.1. Up to three frequencies in Tissue harmonic imaging (probe dependent)
- 6.1.2. R/S: 2 levels
- 6.1.3. Persist: 8 levels
- 6.1.4. Dynamic range: 20-80 dB, 6 dB step
- 6.1.5. Rejection: 33 levels
- 6.1.6. Gain: 10%~100 %, 2% step
- 6.1.7. DGC/TGC: eight level
- 6.1.8. Gray scale map: 16 types
- 6.1.9. Colorize map: 10 types
- 6.1.10. Thermal Index: TIC, TIS, TIB
- 6.1.11. 2B, 4B and seamless dual screen formats
- 6.1.12. Invert (U/D) and transposed (L/R)
- 6.1.13. Focus Number: 4
- 6.1.14. Focus Depth : 8 levels (depth and probe dependent)
- 6.1.15. FOV: 5 levels
- 6.1.16. Image depth up to 23 cm in 2~3cm increments (depth dependent)
- 6.1.17. Harmonic imaging technique is available for all probes

#### 6.2. M-MODE

- 6.2.1 Rejection: 33 levels
- 6.2.2 Dynamic range: 20-80dB, step 6dB
- 6.2.3 Gain: 10-100%, step 2%
- 6.2.4 Gray scale maps: 16 levels

- 6.2.5 Colorize: 16
- 6.2.6 Sweep speed: 4 levels
- 6.3. Pulse wave Doppler Mode (PW)
  - 6.3.1. Gain: 10-100%, 2% step
  - 6.3.2. Frequency: 2 levels
  - 6.3.3. Sweep speed: 4 levels
  - 6.3.4. Rejection: 6 levels
  - 6.3.5. Gray Scale Map: 8 types
  - 6.3.6. Colorize map: 12 types
  - 6.3.7. Dynamic range: 20-80 dB, 5 dB step
  - 6.3.8. Angle correction: -85+85, 1 step
  - 6.3.9. Auto angle correction: 0, +60, -60
  - 6.3.10. Gate size: 13 levels (1-10 mm)
  - 6.3.11. Invert: On, Off
  - 6.3.12. Triplex/Duplex: On, Off
  - 6.3.13. Baseline: 51 levels
  - 6.3.14. Real-time auto Doppler trace and calculation
  - 6.3.15. Velocity Scales: 0.15 cm/s –1025 cm/s (angle 60)
  - 6.3.16. PRF range: 1 to 10 kHz
- 6.4. Color Doppler Mode
  - 6.4.1. Frequency: 2 levels
  - 6.4.2. Gain: 10~100%, 2% steps
  - 6.4.3. Wall filter: 5 levels
  - 6.4.4. R/S: 7 levels
  - 6.4.5. Invert: On/Off
  - 6.4.6. Baseline: 127 levels
  - 6.4.7. Color Map: 10 levels
  - 6.4.8. Color/PDI Width: 20%, 30%, 40%, 50%, 60%
  - 6.4.9. Color/PDI Height: 0.5-12 cm (probe dependent)
  - 6.4.10. Color/PDI Center Depth: 1-16 cm (probe dependent)
  - 6.4.11. Steer: +/-10°, 20° (linear probe)
  - 6.4.12. PRF range: 150 Hz to 12 kHz
- 6.5. Power Doppler Mode
  - 6.5.1. Frequency: 2 levels
  - 6.5.2. Gain: 10~100%, 2% steps
  - 6.5.3. Wall filter: 5 levels
  - 6.5.4. R/S: 4 levels
  - 6.5.5. Persist: 5 levels
  - 6.5.6. PDI Map: 14 levels
  - 6.5.7. Color/PDI Width: 20%, 30%, 40%, 50%, 60%
  - 6.5.8. Color/PDI Height: 0.5-12 cm (probe dependent)
  - 6.5.9. Color/PDI Center Depth: 1-16 cm (probe dependent)
  - 6.5.10. Steer: +/-10°, 20° (linear probe)
  - 6.5.11. PRF range: 150 Hz to 12 kHz

## **7. Configuration**

### **7.1. Monitor**

- 7.1.1. 15-inch color LCD monitor.
- 7.1.2. Wide view angle of 170 degrees
- 7.1.3. 1024\*768 resolutions

### **7.2. Peripheral Signals**

- 7.2.1. VGA: 1 port
- 7.2.2. Video: 1 port
- 7.2.3. S-Video: 1 port
- 7.2.4. Remote: 1 port
- 7.2.5. Audio: 2 ports
- 7.2.6. Ethernet: 1 port
- 7.2.7. USB: 2 ports

### **7.3. Power Requirements**

- 7.3.1. Power supply voltage: 100 ~ 127 VAC or 220 ~ 240 VAC
- 7.3.2. Power supply frequency: 50/60 Hz
- 7.3.3. Power consumption: 500 VA

### **7.4. Dimensions and Weight**

- 7.4.1. Height: 75 mm
- 7.4.2. Width: 355 mm
- 7.4.3. Depth: 366 mm
- 7.4.4. Weight: 5kg (approx.)

### **7.5. Operating conditions**

- 7.5.1. Ambient temperature: 0°C to 40°C
- 7.5.2. Relative humidity: 20% to 95% (no condensation)
- 7.5.3. Atmospheric pressure: 700 hPa to 1060 hPa

### **7.6. Storage and transportation conditions**

- 7.6.1. Ambient temperature: -20°C to 55°C
- 7.6.2. Relative humidity: 20% to 95% (no condensation)
- 7.6.3. Atmospheric pressure: 700 hPa to 1060 hPa